

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A filter for a tobacco smoke inhaling/ generating/ producing device, the said filter having three sections placed longitudinally one after another, comprising:

a first section comprising cellulose acetate fiber acting as a mouth piece;

a second section comprising requisite amounts of specific mesh sizes of activated charcoal selected from the group consisting of charcoal particles having mesh size of BS 44/52, BS 52/60, BS 60/72, BS 72/85, and any combinations thereof for effectively reducing p-benzosemiquinone, a highly reactive major harmful oxidant from the mainstream of said tobacco smoke; and

a third section comprising cellulose acetate fiber located closer to the tobacco, also acting as a barrier between the activated charcoal and tobacco.

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52. (Cancelled)

53. (Previously Presented) The filter as claimed in claim 1, wherein the length of the first section is in the range of 10 to 14 mm.

54. (Previously Presented) The filter as claimed in claim 1, wherein the length of the second section is dependent on the mesh size and / or amount of charcoal used.

55. (Currently Amended) The filter as claimed in claim 1, wherein the length of the second section is in the range of 4.5 mm to 35mm ~~consisting of one or more activated charcoal particles.~~

56. (Previously Presented) The filter as claimed in claim 1, wherein the length of the third section is in the range of 2 to 3 mm.

57. (Currently Amended) The filter as claimed in claim 1, wherein all the three sections are linearly joined together in succession using a thin wall tube made of ~~light~~ lightweight material selected from the group consisting of thin wall plastic tube, paper, plastic wrapped paper and aluminum foil.

58. (Currently Amended) The filter as claimed in claim 1, wherein requisite amounts of specific mesh sizes of the activated charcoal ranging between BS 44/52 and BS 72/85 mesh are placed in a void space between the sections of cellulose acetate filters namely the mouthpiece and the barrier.

59. (Currently Amended) The filter as claimed in claim 1, wherein the amount of charcoal used is in the range between 0.1g and 0.3 g, ~~depending on the specific mesh sizes ranging between BS 44/52 and BS 72/85 mesh.~~

60. (Cancelled)

61. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal particle ~~consists of~~ comprises 0.2 g of the mesh size BS (British standard mesh) 44/52.

62. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal particle ~~consists of~~ comprises 0.3 g of the mesh size BS 44/52.

63. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal particle ~~consists of~~ comprises 0.2 g of the mesh size BS 52/60.

64. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal particle ~~consists of~~ comprises 0.3 g of the mesh size BS 52/60.

65. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal particle ~~consists of~~ comprises 0.15 g of the mesh size BS 60/72.

66. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal particle ~~consists of~~ comprises 0.2 g of the mesh size BS 60/72.

67. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal particle ~~consists of~~ comprises 0.1 g of the mesh size BS 72/85.

68. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal particle ~~consists of~~ comprises 0.15 g of the mesh size BS 72/85.

69. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal ~~used consists of~~ comprises 0.2 g of mesh size BS 44/52 and 0.1 g of mesh size BS 52/60.

70. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal ~~used consists of~~ comprises 0.2 g of mesh size BS 44/52 and 0.1 g of mesh size BS 60/72.

71. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal ~~used consists of~~ comprises 0.1 g of mesh size BS 44/52 and 0.1 g of mesh size BS 72/85.

72. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal ~~used consists of~~ comprises 0.2 g of mesh size BS 44/52 and 0.1 g of mesh size BS 72/85.

73. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal ~~used consists of~~ comprises 0.15 g of mesh size BS 44/52 and 0.1 g of mesh size BS 72/85.

74. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal ~~used consists of~~ comprises 0.1 g of mesh size BS 52/60 and 0.1 g of mesh size BS 60/72.

75. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal ~~used consists of~~ comprises 0.1 g of mesh size BS 52/60 and 0.1 g of mesh size BS 72/85.

76. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal ~~used consists of~~ comprises 0.1 g of mesh size BS 60/72 and 0.1 g of mesh size BS 72/85.

77. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal ~~used consists of~~ comprises 0.1 g of mesh size BS 52/60 and 0.05 g of mesh size BS 72/85.

78. (Currently Amended) The filter as claimed in claim 1, wherein the activated charcoal ~~used consists of~~ comprises 0.1 g of mesh size BS 60/72 and 0.05 g of mesh size BS 72/85.

79. (Currently Amended) The filter as claimed in claim 1, wherein said filter inhibits p-benzosemiquinone (p-BSQ) of the ~~mainstream~~ said smoke up to 85 percent.

80. (Currently Amended) The filter as claimed in claim 1, wherein said filter inhibits protein oxidation, as evidenced by carbonyl formation in BSA by the ~~mainstream~~ smoke up to 89 percent.

81. (Currently Amended) The filter as claimed in claim 1, said filter reduces nitric oxide (NO) of the ~~mainstream of~~ smoke up to 68 percent.

82. (Currently Amended) The filter as claimed in claim 1, wherein nicotine delivery in the ~~mainstream of~~ smoke is reduced from 935  $\mu\text{g}$  to 350-400  $\mu\text{g}$  in a cigarette.

83. (Previously Presented) The filter as claimed in claim 1, wherein use of nicotine fortified tobacco results in increased delivery of nicotine without increasing the level of p-BSQ.

84. (Currently Amended) The filter as claimed in claim 83, wherein said tobacco fortified with 2 to 4 mg of nicotine increases the nicotine delivery without increasing the level of p-BSQ.



85. (Previously Presented) The filter as claimed in claim 83, wherein tobacco fortified with 2 to 4 mg of nicotine increases the nicotine delivery in the main stream smoke from 350-400  $\mu\text{g}$  to 575-700  $\mu\text{g}$  without increasing the level of p-BSQ.

86. (Previously Presented) The filter as claimed in claim 85, wherein nicotine fortified tobacco with 2 to 4 mg of nicotine, delivers nicotine up to 90% without increasing the level of p-BSQ.

87. (Currently Amended) The filter as claimed in claim 1, wherein the ~~mainstream smoke solution~~ is incapable of producing significant oxidative damage to guinea pig lung microsomal proteins *in vitro*.

88. (Currently Amended) The filter as claimed in claim 1, wherein said filter comprising ~~requisite amounts of~~ charcoal particles having mesh size ranging between BS 44/52 to BS 72/85 mesh is proportionate to the length of the device.

89. (Currently Amended) The filter as claimed in claim 1, wherein said filter comprising ~~requisite amounts of~~ charcoal particles having sizes ranging between BS 44/52 mesh to BS 72/85 mesh, which is proportionate to effectively reducing the level of p-benzosemiquinone (p-BSQ), ~~a highly reactive major harmful oxidant,~~ from the ~~mainstream~~ smoke while providing comfortable mouthful of smoke and nicotine delivery.

90. (Previously Presented) The filter as claimed in claim 1, wherein said filter is used in smoking devices selected from group consisting of cigarettes, cigarette holders, pipes and any other smoking devices.

91. (Currently Amended) The filter as claimed in claim 1, wherein said ~~smoking device has~~ activated charcoal for effectively ~~reducing~~ reduces p-BSQ of the ~~mainstream~~ tobacco smoke, and wherein said filter is incorporated into a filter of a tobacco smoking

device such as a cigarette, cigar, pipe or in a separate filter through which tobacco smoke passes before the process of inhaling.

92. (Cancelled)

93. (Cancelled)

94. (Cancelled)

95. (Currently Amended) The filter as claimed in claim 1, wherein the ~~mainstream~~ smoke containing very low level of p-BSQ is incapable of producing significant oxidative damage to the lung microsomal proteins of guinea pigs when said guinea pigs are exposed to smoke emitted from said charcoal-filtered tobacco smoke devices in contrast to marked damage of the lung tissue when the guinea pigs are exposed to smoke from tobacco smoke devices without having the charcoal filter.

96. (New) A tobacco smoke filter comprising at least three sections placed longitudinally one after another, comprising:

a first section comprising cellulose acetate fiber;

a second section comprising an activated charcoal formed by charcoal particles having a mesh size selected from the group consisting of: BS 44/52, BS 52/60, BS 60/72, BS 72/85, and any combinations thereof for effectively reducing p-benzosemiquinone; and

a third section comprising cellulose acetate fiber which provides a barrier between said activated charcoal and said tobacco.

97. (New) The filter as claimed in claim 96, wherein the activated charcoal comprises 0.2 g of mesh size BS 44/52 and 0.1 g of mesh size BS 52/60.

98. (New) The filter as claimed in claim 96, wherein the activated charcoal comprises 0.2 g of mesh size BS 44/52 and 0.1 g of mesh size BS 60/72.

99. (New) The filter as claimed in claim 96, wherein the activated charcoal comprises 0.1 g of mesh size BS 44/52 and 0.1 g of mesh size BS 72/85.

100. (New) The filter as claimed in claim 96, wherein the activated charcoal comprises 0.2 g of mesh size BS 44/52 and 0.1 g of mesh size BS 72/85.

101. (New) The filter as claimed in claim 96, wherein the activated charcoal comprises 0.15 g of mesh size BS 44/52 and 0.1 g of mesh size BS 72/85.

102. (New) The filter as claimed in claim 96, wherein the activated charcoal comprises 0.1 g of mesh size BS 52/60 and 0.1 g of mesh size BS 60/72.

103. (New) The filter as claimed in claim 96, wherein the activated charcoal comprises 0.1 g of mesh size BS 52/60 and 0.1 g of mesh size BS 72/85.

104. (New) The filter as claimed in claim 96, wherein the activated charcoal comprises 0.1 g of mesh size BS 60/72 and 0.1 g of mesh size BS 72/85.

105. (New) The filter as claimed in claim 96, wherein the activated charcoal comprises 0.1 g of mesh size BS 52/60 and 0.05 g of mesh size BS 72/85.

106. (New) The filter as claimed in claim 96, wherein the activated charcoal comprises 0.1 g of mesh size BS 60/72 and 0.05 g of mesh size BS 72/85.